

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
19 April 2001 (19.04.2001)

PCT

(10) International Publication Number
WO 01/27178 A1

- (51) International Patent Classification⁷: C08G 18/08, C08L 75/04, C09D 175/04 (74) Agent: KUPECZ, Arpad; Octrooibureau Los en Stigter B.V., Weteringschans 96, NL-1017 XS Amsterdam (NL).
- (21) International Application Number: PCT/NL00/00740 (81) Designated States (*national*): AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.
- (22) International Filing Date: 16 October 2000 (16.10.2000)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
1013300 15 October 1999 (15.10.1999) NL
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- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:

- With international search report.
- Before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments.

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

ABSTRACT

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(54) Title: PROCESS FOR THE PREPARATION OF ANIONIC AQUEOUS POLYMER DISPERSIONS CONTAINING NO VOLATILE TERTIARY AMINE, OBTAINED DISPERSION AND COATING RESULTING FROM SAID DISPERSION

(57) Abstract: The invention relates to a process for the preparation of an aqueous dispersion of an anionic polyurethane in which initially a tertiary aminofunctional acrylic monomer is used as neutralizing agent for pendant carboxylic acid groups in dispersions of a polyurethane or a polyurethane/polyacrylate, whereafter the unsaturated monomers undergo in situ an addition polymerisation, optionally together with other unsaturated monomers. In the process the isocyanate terminated prepolymer may be reacted with 0-100 % of a stoichiometric amount of a hydroxy functional unsaturated monomer before the dispersion in water. The tertiary amine functional unsaturated monomer is present in a ratio to the anionic residues to be neutralized in the polyurethane prepolymer from 0.3 to 2 and preferably from 0.7 to 1.5. Furthermore the amount of carboxylic acid functions in the isocyanate functional polyurethane prepolymer is from 1 to 15 % and preferably from 2 to 10 %. The invention also relates to dispersions prepared by the present process and to a coating or film obtained from said dispersion.